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ON THE INDO-CHINESE SPECIES OF SYZYGIUM GAERTNER

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THE OCCASION for this enumeration of certain Indo-Chinese species of *Syzygium* is, in part, to characterize a few new species which have appeared in collections received for identification, and in part to readjust the nomenclature of certain other Indo-Chinese species actually represented in the herbarium material available to us for study. This is in conformity with our recently accepted generic concept of *Syzygium* as the proper name under which to place most of the Old World species of *Eugenia*. Comments on a few individual species are added.

We are specially indebted both to Dr. A. Pételot, whose collections form the major part of our additional citations, and to Dr. F. Gagnepain who, at the beginning of our study of the Chinese species of *Eugenia*, graciously supplied us with fragments from types or authentic specimens of his new species from Indo-China.

Syzygium Gaertner has had a varied career. Established, with only four species, primarily on the structure of the fruit supplemented by a very brief floral description, this group has had a checkered career. It has been ranked by various authors as a genus, as a subgenus, and as a section, and shifted from one status to another for no particular or evident reason or reasons. This is in part due, we believe, to the difficulties investigators have experienced in assigning proper generic limits and partly owing to the fact that emphasis in the delineation of the genus was shifted by later authors from fruiting to floral characters. Since flowering specimens were overwhelmingly predominant in collections, perhaps this was inevitable. Our concept of the genus, like that of Alston in Trimen, Handb. Fl. Ceyl. 6(Suppl.): 112. 1931, includes not only *Syzygium* proper but also *Jambosa* de Candolle (although excluding *Acmena* de Candolle¹ as we interpret it). Throughout our study of

¹Merrill, E. D. and L. M. Perry. A synopsis of *Acmena* DC., a valid genus of the Myrtaceae. Jour. Arnold Arb. 19: 1-20. 1938.

the numerous Chinese and the much more numerous Bornean species of *Eugenia* in its broader significance, we have been unable to find any single character or any combination of characters by which these two "genera" may be maintained as independent units. In adopting *Syzygium* Gaertner as name for the genus represented by the majority of the species of Old World *Eugenia* Linn. *sensu latiore*, we again direct attention to the detailed structure of the fruits, temporarily neglected in taxonomic studies of this group, but eminently worthy of consideration in the differentiation of genera.

Most of the species with fruits (usually immature) in our Old World collections show the seed-coat adhering more or less loosely to the pericarp and the two distinct cotyledons attached chiefly near the middle of the opposing faces concealing the hypocotyl within. This is the distinguishing character of *Syzygium*, not the calyptrate character of the corolla so unduly emphasized. The inflorescence is most often paniculate-cymose.

In contrast to the above we find that in most of the New World species of *Eugenia* (of which we have examined the fruits) the pericarp is easily crushed (thinner than in most of the fruits examined from Old World species), the seed (not the naked embryo) is free, the testa is smooth and usually shining, and the embryo, characterized by de Candolle as pseudo-monocotyledonous, appears undivided. The inflorescence is generally in clusters of pedicelled flowers (one flower on a pedicel), the calyx limb is not so prolonged as in *Syzygium* and the stamens are much less incurved in the bud. The species belong to *Eugenia* proper.

Gagnepain's treatment of "*Eugenia* L. (*Jambosa* et *Syzygium* incl.)" in Lecomte, Fl. Gén. Indo-Chine 2: 796–844. 1920, 1921, is the latest study of the complex in this region. Since, as a whole, this renders the species fairly accessible, although we are not entirely in agreement with the major divisions of his key, our enumeration follows the general plan of his conspectus. The new species are inserted adjacent to those with which they appear to be approximately coincident as regards the ultimate divisions of the key. Wherever possible we have added new records of collections. The other species of which we have some representation are indicated merely as being found in Indo-China.

The following species included in Gagnepain's work are not represented in our herbarium by Indo-Chinese specimens: *Eugenia chlorantha* Duthie, *E. bracteolata* Wight, *E. albiflora* Duthie, *E. tephrodes* Hance, *E. leptantha* Wight, *E. formosa* var. *ternifolia* (Roxb.) Duthie, *E. malayana* Gagnep. (but cf. discussion under *S. crassiflorum* Merr. & Perry), *E. malaccensis* Linn., *E. Wightiana* Wight (we have been unable

to distinguish some of Gagnepain's citations from some Indian specimens determined as *E. claviflora* Roxb.), and *E. siamensis* Craib. *E. nigrans* Gagnep. and *E. operculata* Roxb. both belong to the genus *Cleistocalyx*.¹ *E. bracteata* Roxb. is a true *Eugenia*. *E. circumscissa* Gagnep. is best left as is until more adequate material is available to determine its status, as it may well prove to be worthy of generic rank.

1. ***Syzygium abortivum*** (Gagnep.) comb. nov.

Eugenia abortiva Gagnep. Not. Syst. 3: 316. 1917, et in Lecomte, Fl. Gén. Indo-Chine 2: 802, f. 86. 1920; Craib, Fl. Siam. Enum. 1: 631. 1931.

INDO-CHINA, Annam, Hue and vicinity, *Squires 106*, Jan.-May, 1927. Burma, Laos, Annam.

With some hesitation we have associated the above collection with this species. It differs in having leaves up to 7.5 cm. long and scarcely more than 1 cm. broad. The primary veins are somewhat closer than in the fragment kindly supplied by Dr. F. Gagnepain but they compare favorably with those of some leaves of *Rock 2002*, Ken Tung Territory, Burma, which seems unquestionably to be referable to this species. Further, the inflorescence is not always strictly terminal, a character noted by both Gagnepain and Craib.

2. ***Syzygium zeylanicum*** (Linn.) DC. Prodr. 3: 260. 1828; Wight, Ic. 1: t. 73. 1838.

Myrtus zeylanica Linn. Sp. Pl. 472. 1753.

Eugenia spicata Lam. Encycl. 3: 201. 1789; Koord. & Val. Meded. Lands Plant. 40: 122. 1900 (Bijdr. Boomsoort. Java 6: 122).

Eugenia zeylanica Wight, Ill. 2: 15. 1841; Duthie in Hooker f. Fl. Brit. Ind. 2: 485. 1878; King, Jour. As. Soc. Bengal 70(2): 108. 1901 (Mater. Fl. Malay. Penin. 3: 538); Gagnep. in Lecomte, Fl. Gén. Indo-Chine 2: 804. 1920; Ridl. Fl. Malay Penin. 1: 738. 1922; Craib, Fl. Siam. Enum. 1: 666. 1931.

INDO-CHINA. Ranging from China and India southward into Malaysia.

3. ***Syzygium oblatum*** (Roxb.) Wall. List, no. 3569. 1831, *nomen nudum*; Cowan & Cowan, Trees North. Bengal 68. 1929.

Eugenia oblata Roxb. Hort. Beng. 37. 1814, *nomen nudum*; Fl. Ind. ed. 2, 2: 493. 1832; Kurz, For. Fl. Brit. Burma 1: 488. 1877; Duthie in Hooker f. Fl. Brit. Ind. 2: 492. 1878; King, Jour. As. Soc. Bengal 70(2): 114. 1901 (Mater. Fl. Malay. Penin. 3: 544); Ridley, Fl. Malay Penin. 1: 749. 1922, pro parte; Craib, Fl. Siam. Enum. 1: 652. 1931.

¹Merrill, E. D. and L. M. Perry. Reinstatement and revision of *Cleistocalyx* Blume (including *Acicalyptus* A. Gray), a valid genus of the Myrtaceae. Jour. Arnold Arb. 18: 322-343, t. 215. 1937.

INDO-CHINA, Annam, Mount Bana, *Clemens* 3293, May-July, 1927. Burma, Siam, the Malay Peninsula, and Borneo.

4. ***Syzygium baviense*** (Gagnep.) comb. nov.

Eugenia baviensis Gagnep. Not. Syst. 3: 317. 1917, et in Lecomte, Fl. Gén. Indo-Chine 2: 806, f. 86. 1920.

INDO-CHINA, Tonkin, Chapa, *Pételot* 6152, July, 1931, forest back of the hotel, at about 1500 m. alt. Known only from Tonkin.

5. ***Syzygium odoratum*** (Lour.) DC. Prodr. 3: 260. 1828; Hook. & Arn. Bot. Beechey's Voy. 187. 1833; Benth. Fl. Hongk. 119. 1861.

Opa odorata Lour. Fl. Cochinch. 309. 1790; Moore, Jour. Bot. 63: 283. 1925, non *Eugenia odorata* Berg.

Eugenia Millettiana Hemsl. Jour. Linn. Soc. Bot. 23: 297. 1887; Merr. Trans. Amer. Phil. Soc. 24(2): 285. 1935; Lingnan Sci. Jour. 14: 41. 1935.

Eugenia Deckeri Gagnep. Not. Syst. 3: 323. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 807. 1920.

INDO-CHINA, Annam, Tourane and vicinity, *Clemens* 3778, 4215, 4366, 4489; probably from the vicinity of Hue, *Loureiro*, photograph of the type of *Opa odorata* Lour., the original in the herbarium of the British Museum. Kwangtung and Hainan.

A complete discussion of this species under the name *Eugenia Millettiana* Hemsl. may be found in Merr. Trans. Amer. Phil. Soc. l. c. Much confusion in this particular concept arose owing to the fact that Hemsley cited collections of two wholly different species under *Eugenia Millettiana*, and both have been accepted as typifying his species. When no original description is given, the species must be interpreted from the name-bringing synonym, i. e. *Opa odorata* Lour. This specific name was invalid in *Eugenia* but is tenable in *Syzygium*. Dr. F. Gagnepain very kindly sent us a fragment of *E. Deckeri* which proved to be, as we had anticipated, true *S. odoratum* (Lour.) DC. It should be noted that the specimen on which the description of *Eugenia Deckeri* Gagnep. was based was not from Tonkin, Indo-China, but rather from the small French colony of Kwangchow on the Luichow Peninsula, Kwangtung Province, China.

6. ***Syzygium mekongense*** (Gagnep.) comb. nov.

Eugenia mekongensis Gagnep. Not. Syst. 3: 328. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 807. 1920; Craib, Fl. Siam. Enum. 1: 652. 1931.

INDO-CHINA.

7. ***Syzygium Bonii*** (Gagnep.) comb. nov.

Eugenia Bonii Gagnep. Not. Syst. 3: 318. 1917, et in Lecomte, Fl. Gén. Indo-Chine 2: 808, f. 87. 1920.

INDO-CHINA.

8. **Syzygium Petelotii** sp. nov.

Rami nigro-cinerei; ramulis leviter compressis brunnescentibus, minute pustulatis; foliis 4–7 cm. longis, 2–4 cm. latis, ellipticis vel leviter obovatis, basi cuneatis, apice obtuse ac breviter acuminatis, acumine circiter 0.5 mm. longo, subcoriaceis, crebre ac minute punctatis, costa supra canaliculata subtus prominula, venis primariis circiter 3 mm. remotis supra \pm obscuris, subtus manifestis sed non prominulis, vena intramarginali leviter manifesta circiter 1 mm. a margine disposita, venulis \pm obscuris; petiolo 4–6 mm. longo; inflorescentiis terminalibus, compactis, \pm 1.5 cm. altis latisque, ramis brevibus, plerumque 3-floris; alabastris obovoideis, \pm 5 mm. longis, apice circiter 4 mm. diametro; calyce undulato, lobis vix 0.7 mm. longis, petalis calyptratim deciduis, antheris 0.5 mm. longis, ellipticis, minute glanduloso-mucronatis; fructibus ignotis.

INDO-CHINA, Tonkin, Province of Phu Tho, Phu Ho, *Pételot* 1043 (type, Herb. Arn. Arb.), June, 1923.

This species suggests an alliance with *Syzygium Bonii* (Gagnep.) in the compact inflorescence and the practically truncate calyces (after anthesis) but the leaves of *S. Bonii* are lanceolate and lack the copious minute glands so characteristic of the lower surface of those of *S. Petelotii*.

9. **Syzygium sterrophyllum** sp. nov.

Eugenia fluviatilis sensu Gagnep. in Lecomte, Fl. Gén. Indo-Chine 2: 810. 1920, non Hemsl.

Arbuscula 1–3 m. alta; ramulis tetragonis, junioribus subalatis, brunneis, glabris; foliis coriaceis, lineari-lanceolatis, utrinque obtuse acuminatis subaequaliter angustatis, 4.5–9 cm. longis, 1–1.8 cm. latis, siccis olivaceis, supra sparse et minute punctatis, subtus crebre glanduloso-punctatis, venis primariis numerosis, perspicuis, ascendentibus, circiter 2 mm. remotis, vena submarginali a margine 0.5–1 mm. distante; petiolo 3–6 mm. longo; paniculis multifloris, axillaribus terminalibusque, circiter 2.5 cm. longis, ramulis 2–5 mm. longis; floribus sessilibus vel subsessilibus, alabastris obovoideis, 5 mm. longis, 3 mm. latis; calyce turbinato, truncato vel undulato; petalis calyptratim vel singulatim deciduis; staminibus numerosis, antheris ellipticis, 0.6 mm. longis; stylo \pm 5 mm. longo; fructibus immaturis elongato-urceolatis, 7 mm. longis, 5 mm. diametro.

CHINA, K w a n g t u n g , Shi-wan-da-shan, *Tso* 23377 (**type**, Herb. Arn. Arb.), July, 1933, shrub in shaded ravine. K w a n g s i , Seh-feng, Dar Shan, S. Nanning, *Ching* 7857, 7890, 8089, 8230, October, 1928. INDO-CHINA, Tonkin, *Balansa* 1159; Long-tcheou, *Simond* s. n.

All the Chinese specimens were collected at 350–600 m. altitude. The leaves are described as dark and shining green above, light green below; little, if any, of the lustre remains in the dried collections and all are brownish in tone.

This species most closely approaches *Eugenia fluviatilis* Hemsl. in habit; but, the branchlets are tetragonous and the leaves more acuminate at the apex. They are also obscurely punctate above although copiously glandular beneath; furthermore, the flowers are a little broader and sessile or subsessile. In contrast, the branchlets of *E. fluviatilis* are only compressed or at most slightly sulcate, the leaves are rounded at the apex, copiously punctate above and obscurely, if at all, glandular-punctate beneath, and the flowers are pedicellate. This species also recalls *E. Winitii* Craib, but the leaves are smaller and the inflorescences are much shorter.

Eugenia fluviatilis Hemsl. was based on a collection from Hainan. As far as we know (and we have examined as many available collections as possible), the species is confined to the island.

10. **Syzygium buxifolium** Hook. & Arn. Bot. Beechey's Voy. 187. 1833; Walpers Rep. 2: 180. 1843; Benth. Jour. Bot. Kew Gard. Misc. 4: 118. 1852, Fl. Hongk. 118. 1861.

Eugenia microphylla Abel, Narr. Jour. China 181, 364. 1818; Forbes, Jour. Bot. 22: 124. 1884; Rehder & Wilson in Sargent, Pl. Wils. 2: 420. 1915, Jour. Arnold Arb. 8: 179. 1927; Merr. Jour. Arnold Arb. 18: 71. 1937; non *Syzygium microphyllum* Gamble, 1919.

Syllisium buxifolium Meyen & Schauer, Nov. Act. Acad. Leop.-Carol. Nat. Cur. 19: Suppl. 1: 334. 1843.

Eugenia sinensis Hemsl. Jour. Linn. Soc. Bot. 23: 298. 1887.

Syzygium microphyllum sensu Masamune, Mem. Fac. Sci. Agr. Taihoku Univ. 11: 323. 1934, non Gamble.

INDO-CHINA, Tonkin, Chapa, Massif du Fan Tsi Pan, *Pételot* 4678, July, 1931, about 1500 m. alt. Chekiang, Anhwei, Fukien, Kiangsi, Kweichow, Kwangtung, Riu Kiu Islands and Formosa.

Pételot 4678, a collection in the early fruiting stage, appears to be a form of this most variable and puzzling species. The leaves are more elongate than in the typical but are fairly comparable to those of a specimen from Kiangsi. A full account of *Syzygium buxifolium* is to be found in our forthcoming study of the Chinese species of this genus. *Syzygium microphyllum* Gamble was based on *Eugenia microphylla* Bedd., not on *E. microphylla* Abel.

11. **Syzygium szemaoense** sp. nov.

Arbuscula 2–3 m. alta; ramulis tetragonis, subalatis, post alarum delapsum cylindricis; foliis 4–10 cm. longis, 1.7–4 cm. latis, late vel anguste ellipticis, basi cuneatis, apice obtuse acuminatis, subcoriaceis, consperse punctatis, siccis brunneis, venis primariis subtus gracilibus, 3–4 mm. remotis, manifeste in venam intramarginalem a margine 1 mm. distantem confluentibus, minute glanduloso-punctatis; petiolo 3–5 mm. longo; paniculis axillaribus terminalibusque, vix 1.5 cm. longis, ramulis brachiatis; floribus immaturis, sessilibus vel brevipedicellatis, alabastris anguste obovoideis, 3.5 mm. longis, vix 2 mm. diametro; fructibus ellipsoideis vel pyriformibus, 10–15 mm. longis, 7–10 mm. diametro, atris, polyembryonatis.

CHINA, Yunnan, Szemao, *Henry* 12138 (**type**, Herb. New York Bot. Gard.; isotype, Herb. Arn. Arb.), 12895; Lung-ling Hsien, *Tsai* 56689. INDO-CHINA, Tonkin, Chapa, Massif du Fan Tsi Pan, *Pételot* 6153, about 1400 m. alt.

This species may be allied to *S. campylocarpum* (Gagnep.) Merr. & Perry. In that species, however, the leaves are much thinner and obscurely pellucid-punctate; the fruits are inequilateral and slightly curved. In our species the leaves are thicker and the fruit is regular and equilateral. Two collections closely allied, but perhaps not conspecific with the above, are: HAINAN, Po-ting, *How* 72922, 73422.

12. **Syzygium cambodianum** (Gagnep.) comb. nov.

Eugenia cambodiana Gagnep. Not. Syst. 3: 319. 1917, et in Lecomte, Fl. Gén. Indo-Chine 2: 810. 1920.

INDO-CHINA.

13. **Syzygium tonkinense** (Gagnep.) comb. nov.

Eugenia tonkinensis Gagnep. Not. Syst. 3: 334. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 811. 1920.

INDO-CHINA.

14. **Syzygium corticosum** (Lour.) comb. nov.

Eugenia corticosa Lour. Fl. Cochinch. 308. 1790, ed. Willd. 376. 1793; Moore, Jour. Bot. 63: 283. 1925; Merr. Trans. Am. Philos. Soc. 24(2): 284. 1935.

Myrtus corticosa Spreng. Syst. 2: 488. 1825.

INDO-CHINA, Annam, Mount Bana, *J. & M. S. Clemens* 3532, May-July, 1927; probably from near Hue, *Loureiro*, photograph of the type of *Eugenia corticosa* Lour., the original in Herb. Brit. Museum.

Merrill has examined the original and found it to be very closely

matched by *Clemens* 3532. This species, if traced through Gagnepain's key, falls in the vicinity of *E. tonkinensis*. A comparison of the two shows that the former differs slightly from the latter in both foliar and floral characters. The dried leaves of *Clemens* 3532 are of a pale olive-green color (not brown nor reddish), the upper surfaces are minutely and inconspicuously punctulate and the lower ones are sprinkled with minute dark glands. Gagnepain does not mention this character in his description of *E. tonkinensis* and we do not find glands on the one authentic leaf at our disposal. The flower-buds of *Clemens* 3532 are about 2.5 mm. long and 1.5 mm. in diameter at the apex; those of *E. tonkinensis* are about 4 mm. long and 2.5 mm. in diameter at the apex, with, we suspect from the remnants, much longer stamens than in the former.

15. ***Syzygium cinereum*** Wall. List, no. 3576. 1831, *nomen nudum*.

Eugenia cinerea Kurz, Prel. Rep. Pegu App. **A**: LXIV, App. **B**: 50. 1875, Jour. As. Soc. Bengal **46**(2): 66. 1877, For. Fl. Brit. Burma **1**: 483. 1877; Ridley, Fl. Malay Penin. **1**: 744. 1922; Craib, Fl. Siam. Enum. **1**: 634. 1931.

Eugenia brachiata sensu Duthie in Hooker f. Fl. Brit. Ind. **2**: 496. 1878, pro parte; Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 811. 1920, non Roxb.

Eugenia pseudosubtilis King var. *platyphylla* King, Jour. As. Soc. Bengal **70**(2): 124. 1901 (Mater. Fl. Malay. Penin. **3**: 554).

INDO-CHINA, Tonkin, Province of Thai Nguyen, between Thai Nguyen and Phan Mê, *Pételot* 5272, 6146, May, 1933 and April, 1935; Province of Vinh Yen, *Pételot* 6154. Burma and the Malay Peninsula.

Nomenclaturally perhaps the identity of this species is open to some question. Tentatively we are accepting *Syzygium cinereum* Wall. as a valid name owing to the fact that Kurz first published his species as "*Eugenia cinerea* Wall. Cat. 3576" in the Pegu Report, Appendix A, and also in the Journal of the Asiatic Society of Bengal thus typifying the species and at the same time associating Wallich's name with a valid description. However, we must also call attention to Craib's comment, Fl. Siam. Enum. **1**: 634, in which he chooses the Burmese plant as the type (Wallich's specimen was collected in Penang). King seems to have overlooked Kurz's name, or else, like Craib, he had seen no specimens from Burma to match the plant from the Malay Peninsula. We cannot determine from Ridley's key, Fl. Malay Penin. **1**: 722, just what he regards as differences between *E. cinerea* Kurz and *E. pseudosubtilis* King. We have only one immature collection from the Malay Peninsula determined as *E. pseudosubtilis* King by Dr. M. R. Henderson. It closely resembles our Indo-Chinese material. *Eugenia brachiata* Roxb. is a native of Amboina and has lateral inflorescences.

16. *Syzygium irregulare* (Craib) comb. nov.

Eugenia irregularis Craib, Kew Bull. 1930: 167. 1930, Fl. Siam. Enum. 1: 646. 1931.

INDO-CHINA, Tonkin, near Chapa, Massif du Fan Tse Pan, *Pételot* 4677, July, 1931, at about 1400 m. alt., 6151, September, 1930, at about 1700 m. alt. Siam.

Without authentic (or even any so-named) material for comparison, these collections so closely match Craib's description that we hesitate to place them elsewhere. They do differ in having slightly angled branchlets and in the dried state are of a brownish rather than a greenish color. The petals tend to separate but by Gagnepain's key the species seems to be close to "12. *E. brachyata*" i.e. *E. brachiata* Roxb., so we are placing it in this position.

17. *Syzygium eburneum* (Gagnep.) comb. nov.

Eugenia eburnea Gagnep. Not. Syst. 3: 324. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 812, f. 88. 1920.

INDO-CHINA.

18. *Syzygium cochinchinense* (Gagnep.) comb. nov.

Eugenia cochinchinensis Gagnep. Not. Syst. 3: 322. 1918, et in Lecomte, Fl. Gén. Indo-Chine, 2: 814. 1920; Craib, Fl. Siam. Enum. 1: 636. 1931.

INDO-CHINA.

19. *Syzygium Thorelii* (Gagnep.) comb. nov.

Eugenia Thorelii Gagnep. Not. Syst. 3: 333. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 816. 1920.

INDO-CHINA.

20. *Syzygium attopuense* (Gagnep.) comb. nov.

Eugenia attopuensis Gagnep. Not. Syst. 3: 316. 1917, et in Lecomte, Fl. Gén. Indo-Chine 2: 816. 1920.

INDO-CHINA.

21. *Syzygium Bullockii* (Hance) comb. nov.

Eugenia Bullockii Hance, Jour. Bot. 16: 227. 1878; Forbes & Hemsl. Jour. Linn. Soc. Bot. 23: 296. 1887; Merr. Philip. Jour. Sci. 15: 249. 1919; Gagnep. in Lecomte, Fl. Gén. Indo-Chine 2: 817. 1920; Merr. Lingnan Sci. Jour. 5: 136. 1927, Trans. Amer. Phil. Soc. 24(2): 284. 1935.

Myrtus androsaemoides sensu Lour. Fl. Cochinch. 312. 1790, non Linn.

INDO-CHINA, Annam, Province of Quang Binh, Duc Thi village, *Pételot* 6149, July, 1930; Dam Thuy village, *Pételot* 6150, June, 1930; Tourane and vicinity, *J. & M. S. Clemens* 3716, May-July, 1927; Hue

and vicinity, *F. A. McClure s. n.*, September 29, 1921. Kwangtung, Hainan, Tonkin and Laos.

22. ***Syzygium Cumini*** (L.) Skeels, U. S. Dept. Agr. Bur. Pl. Ind. Bull. **248**: 25. 1912; Alston, Handb. Fl. Ceyl. **6**(Suppl.): 116. 1931.

Myrtus Cumini Linn. Sp. Pl. 471. 1753.

Eugenia Jambolana Lam. Encycl. **3**: 198. 1789; Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 818. 1920.

Jambolifera pedunculata sensu Lour. Fl. Cochinch. 230. 1790, non Linn.

Syzygium Jambolanum DC. Prodr. **3**: 259. 1828; Wight & Arn. Prodr. **1**: 329. 1834.

Eugenia Cumini Druce, Rept. Bot. Exch. Club Brit. Isles **3**: 418. 1914; Merr. Lingnan Sci. Jour. **5**: 136. 1927; Craib, Fl. Siam. Enum. **1**: 637. 1931, Merr. Trans. Amer. Phil. Soc. **24**(2): 284. 1935 (Comment. Fl. Cochinch.).

Eugenia Tsoi Merr. & Chun, Sunyat. **2**: 291. 1935.

INDO-CHINA, Tonkin, route from Vinh Yen to Tam Dao, *Pételot* 4679, April, 1931, at about 200 m. alt.; Province of Vinh Yen, route from Vinh Yen to Pont des Linh, *Pételot* 6148, April, 1933; Annam, Mount Bana, *J. & M. S. Clemens* 4040, May-July, 1927; Dalat and vicinity, *Squires* 925, March-April, 1932.

Widely distributed in the Indo-Malaysian region, extending from India and China southward.

23. ***Syzygium balsameum*** Wall. List, no. 3592. 1831, *nomen nudum*; Wight, Ill. **2**: 16. 1841, in syn.; Cowan & Cowan, Trees North. Bengal 68. 1929.

Eugenia balsamea Wight, Ill. **2**: 16. 1841; Kurz, For. Fl. Brit. Burma **1**: 485. 1877; Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 819. 1920; Craib, Fl. Siam. Enum. **1**: 633. 1921.

INDO-CHINA, Tonkin, Province of Tuyen-Quang, no collector given, no. 7, January, 1931. India to Burma, Indo-China and the southwestern part of China.

24. ***Syzygium polyanthum*** (Wight) Walp. Rep. **2**: 180. 1843, non Miq. (1855).

Eugenia polyantha Wight, Ill. **2**: 17. 1841; Duthie in Hooker f. Fl. Brit. Ind. **2**: 496. 1878; King, Jour. As. Soc. Bengal **70**(2): 103. 1901 (Mater. Fl. Malay. Penin. **3**: 533); Craib, Fl. Siam. Enum. **1**: 656. 1931.

Eugenia resinosa Gagnep. Not. Syst. **3**: 331. 1918, et in Lecomte, Fl. Gén. Indo-Chine **2**: 820. 1920; Craib, Fl. Siam. Enum. **1**: 656. 1931, in syn.

Eugenia balsamea sensu Ridley, Fl. Malay Penin. **1**: 754. 1922, non Wight (fide Craib).

INDO-CHINA, Tonkin, Province of Ninh Binh, vicinity of Cho Ganh,

Pételot 981, July, 1923; Cho Ganh, *Pételot 1481*, October, 1923; near Hanoi, *Pételot 4305*, February, 1932.

A wide-spread species found in Indo-China, Burma, Siam, the Malay Peninsula, Sumatra, Borneo and Java.

25. ***Syzygium fruticosum* DC.** Prodr. **3**: 260. 1828, Mém. Myrt. *t.* 19. 1842.

Eugenia fruticosa Roxb. Fl. Ind. ed. 2, **2**: 487. 1832; Wight, Ic. **2**: *t.* 624. 1843; Kurz, For. Fl. Brit. Burma **1**: 485. 1877; Duthie in Hooker f. Fl. Brit. Ind. **2**: 499. 1879; Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 843. 1921; Craib, Fl. Siam. Enum. **1**: 642. 1931.

INDO-CHINA, Laos, Mong Hsing, *Ward 8913*, May, 1929. Bengal, Upper Burma, Siam and Yunnan.

26. ***Syzygium Chanlos* (Gagnep.) comb. nov.**

Eugenia Chanlos Gagnep. Not. Syst. **3**: 320. 1917, et in Lecomte, Fl. Gén. Indo-Chine **2**: 821. 1920.

INDO-CHINA.

27. ***Syzygium lineatum* (DC.) comb. nov.**

Myrtus lineata Blume, Bijdr. 1087. 1826, non Sw.

Jambosa lineata DC. Prodr. **3**: 287. 1828.

Syzygium longiflorum Presl, Bot. Bemerk. 70. 1844, Walp. Ann. **1**: 314. 1848-1849.

Clavimyrthus lineata Blume, Mus. Bot. Lugd.-Bat. **1**: 116. 1849.

Clavimyrthus latifolia Blume, op. cit. 117.

Jambosa latifolia Miq. Fl. Ind. Bat. **1**(1): 429. 1855.

Jambosa Teysmanni Miq. l. c.

Jambosa rubricaulis Miq. op. cit. 432.

Eugenia lineata Duthie in Hooker f. Fl. Brit. Ind. **2**: 487. 1878.

Eugenia longiflora F.-Vill. Nov. App. 86. 1880; Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 822. 1920, pro parte; Craib, Fl. Siam. Enum. **1**: 650. 1931.

Eugenia Teysmanni Koord. & Val. Meded. Lands Plant. **40**: 164. 1900 (Bijdr. Boomsoort. Java **6**: 164).

Eugenia marivelesensis Merr. Philip. Jour. Sci. **1**: Suppl. 106. 1906.

Eugenia Miquelii Elmer, Leaf. Philip. Bot. **4**: 1441. 1912.

Eugenia longicalyx Ridley, Jour. Bot. **68**: 11. 1930.

INDO-CHINA, Siam and Malaysia.

According to Art. 69 of the International Rules of Botanical Nomenclature, *Jambosa lineata* DC. is to be regarded as a new name and thus this specific name is the oldest available one for this species.

28. ***Syzygium syzygioides* (Miq.) comb. nov.**

Jambosa syzygioides Miq. Fl. Ind. Bat. **1**(1): 431. 1855.

Calyptranthus caryophyllifolia Blume, Bijdr. 1089. 1826, non Willd. 1796.

Syzygium nclitricarpium Teijsm. & Binnend. Nat. Tijdschr. Ned. Ind. **27**: 53. 1863 (fide Koord. & Val.).

Eugenia cymosa sensu Wight, Ill. **2**: 17. 1841, Ic. **2**: t. 555. 1843; Kurz, Jour. As. Soc. Bengal **46**(2): 67. 1877, For. Fl. Brit. Burma **1**: 486. 1877; Duthie in Hooker f. Fl. Brit. Ind. **2**: 482. 1878; King, Jour. As. Soc. Bengal **70**(2): 100. 1901 (Mater. Fl. Malay. Penin. **3**: 530); Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 823. 1920; Ridley, Fl. Malay Penin. **1**: 737. 1922; Craib, Fl. Siam. Enum. **1**: 637. 1931; non Lam. 1789.

INDO-CHINA, Burma, Siam and Malaysia.

Both Gagnepain and Craib indicate that the Indo-Malaysian collections commonly accepted to represent *Eugenia cymosa* Lam. do not represent that species. In our study of the Bornean species of *Syzygium* we investigated this matter. The type of *Eugenia cymosa* Lam. was a Mauritius specimen, now preserved in Lamarck's herbarium. It represents a species very different from the Indo-Malaysian form so long confused with it. Consequently we accept the specific epithet *syzygioides* for the Malaysian plant. A full discussion of the type of *Eugenia cymosa* Lam. will be found in our forthcoming treatment of the Bornean species of *Syzygium*.

29. ***Syzygium Levinei* (Merr.) comb. nov.**

Eugenia Levinei Merr. Lingnan Sci. Jour. **13**: 39. 1934.

Eugenia Millettiana sensu Dunn & Tutcher, Kew Bull. Add. Ser. **10**: 105. 1912; Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 823. 1920, non Hemsl.

INDO-CHINA, Tonkin, Province of Phu Tho, Phu Ho, *Pételot* 1074, 1510, August and September, 1923; near the Noire River, *Pételot* 4319, January, 1932. Annam, Kwangtung and Kwangsi.

A species for some time confused with *Eugenia Millettiana* Hemsl. but easily distinguished by the short and protruding glandular hairs which clothe the rachis and the branches of the inflorescence. See *Syzygium odoratum* (Lour.) DC., no. 5 above, for a note on Hemsley's species.

30. ***Syzygium vestitum* sp. nov.**

Arbor vel arbuscula; ramis teretibus, ramulis teretibus vel ad nodos modice complanatis, rufo-glanduloso-pilosis; foliis 8–20 cm. longis, 3.5–7 cm. latis, elliptico-oblongis, basi rotundatis vel obtusis, apice abrupte ac obtuse acuminatis, brunnescentibus subtus pallidioribus copiose nigro-punctulatis, costa supra canaliculata subtus prominente, rufo-puberula, venis primariis utrinque circiter 15 subtus prominulis, vena intramarginali circiter 3 mm. a margine conjunctis sparse rufo-puberulis; petiolo 6–10 mm. longo, rufo-piloso; inflorescentiis usque ad 14 cm. longis terminalibus ramosis, rachi ac ramis compressis rufo-

glanduloso-pilosis, alabastris sessilibus elongato-obconicis, 4–5 mm. longis apice 2–3 mm. diametro; calyce puberulo, lobis \pm 1 mm. longis, rotundatis; petalis singillatim caducis, antheris glanduloso-mucronatis; fructibus ignotis.

INDO-CHINA, Annam, Mount Bana, *J. & M. S. Clemens* 3296 (**type**, Arn. Arb. Herb.; isotype, New York Bot. Gard. Herb.), 4453, May-July, 1927; Tonkin, Chapa, *Pételot* 6145, mountain ravine, about 1500 m. alt.

The reddish glandular-pilose indumentum of the branchlets and the panicle call to mind *Eugenia furfuracea* Craib and *E. Holttumi* Ridley. The first differs from our species in having leaves obovate-oblong or obovate-elliptic with a rounded apex and a cuneate base, also in showing a second intramarginal vein. The second species has more primary veins, a shorter petiole and minute subulate sepals. Although we have no specimens of either *E. furfuracea* Craib or *E. Holttumi* Ridl. for comparison, there seems to be no question from their descriptions that *S. vestitum* is a distinct species.

31. **Syzygium pachysarcum** (Gagnep.) comb. nov.

Eugenia pachysarca Gagnep. Not. Syst. 3: 329. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 824. 1920.

INDO-CHINA.

32. **Syzygium Tramnion** (Gagnep.) comb. nov.

Eugenia Tramnion Gagnep. Not. Syst. 3: 332. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 825. 1921.

INDO-CHINA.

33. **Syzygium touranense** sp. nov.

Arbor parva; ramulis leviter compressis atrobrunneis 1.5–2 mm. diametro; foliis ellipticis 5.5–9 cm. longis 2.7–5 cm. latis, basi cuneatis, apice obtuse attenuatis, subcoriaceis supra nitidis minute punctulatis fuscis, subtus pallidioribus minute glandulosis, venis primariis utrinque circiter 9–11 inter se 6–10 mm. distantibus supra manifestis subtus prominulis, 4–5 mm. a margine arcuatim anastomosantibus, venulis laxe reticulatis; petiolo \pm 7 mm. longo; inflorescentiis terminalibus axillari-busque usque ad 4 cm. longis ramosis, rachi ramisque obtuse angulatis minute ac consperse pustulatis, floribus in ramulis ultimis pluribus dispositis, sessilibus; calyce post anthesin 4.5 mm. longo, apice 2.5 mm. diametro, parte expansa turbinata, basi in pseudopedicellum ad 2.5 mm. longum contracto, lobis margine membranaceis, 1 mm. longis, petalis singillatim deciduis, antheris vix 0.4 mm. longis minute glanduloso-mucronatis; fructibus ignotis.

INDO-CHINA, Annam, Tourane and vicinity, *J. & M. S. Clemens* 4300 (**type**, Arn. Arb. Herb.; isotype, New York Bot. Gard. Herb.), May-July, 1927.

Possibly a relative of *S. Tramnion* (Gagnep.), *S. touranense* is best characterized by the rather broadly elliptic and recurving leaves with somewhat prominent and remote primary veins, and the floral clusters at the more or less divided (as if about to branch) tips of the branches of the inflorescence. The flower is distinctive in having calyx-lobes with pale membranous margins and a practically cylindric pseudostalk.

34. **Syzygium grande** (Wight) Walp. Rep. **2**: 180. 1843.

Eugenia grandis Wight, Ill. **2**: 17. 1841, Ic. **2**: t. 614. 1843; Kurz, For. Fl. Brit. Burma **1**: 489. 1877; Duthie in Hooker f. Fl. Brit. Ind. **2**: 475. 1878; Gagnep. in Lecomte, Fl. Gén. Indo-Chine **2**: 826. 1921; Craib, Fl. Siam. Enum. **1**: 643. 1931.

Eugenia cymosa Roxb. Fl. Ind. ed. 2, **2**: 492. 1832, non Lam. (1789).

Jambosa firma Blume, Mus. Bot. Lugd.-Bat. **1**: 108. 1849.

INDO-CHINA, Burma, Siam, the Malay Peninsula, Borneo.

35. **Syzygium glomerulatum** (Gagnep.) comb. nov.

Eugenia glomerulata Gagnep. Not. Syst. **3**: 325. 1918, et in Lecomte, Fl. Gén. Indo-Chine **2**: 826, f. 89. 1921.

INDO-CHINA.

36. **Syzygium Tsoongii** (Merr.) comb. nov.

Eugenia Tsoongii Merr. Philip. Jour. Sci. **21**: 504. 1922.

Eugenia leucocarpa Gagnep. Not. Syst. **3**: 327. 1918, et in Lecomte, Fl. Gén. Indo-Chine **2**: 828. 1921, non Merr. 1916.

INDO-CHINA, Annam, Tourane and vicinity, *J. & M. S. Clemens* 3380, May-July, 1927; Province of Quang Binh, Ben Trien, along the River Song Dai, *Pételot* 4676, July, 1930; Quang Tri, *Chevalier* 40207.

KWANGTUNG, Hainan.

Eugenia Tsoongii Merr. and *E. leucocarpa* Gagnep., described independently, appear to be the same species. Although the specific designation *leucocarpa* is the earlier, nomenclaturally it is a later homonym and hence is not tenable.

37. **Syzygium compongense** (Gagnep.) comb. nov.

Eugenia compongensis Gagnep. Not. Syst. **3**: 323. 1918, et in Lecomte, Fl. Gén. Indo-Chine **2**: 828. 1921.

INDO-CHINA.

38. **Syzygium tinctorium** (Gagnep.) comb. nov.

Eugenia tinctoria Gagnep. Not. Syst. **3**: 334. 1918, et in Lecomte, Fl.

Gén. Indo-Chine 2: 830. 1921.

INDO-CHINA.

39. **Syzygium sphaeranthum** (Gagnep.) comb. nov.

Eugenia sphaerantha Gagnep. Not. Syst. 3: 333. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 830. 1921.

INDO-CHINA.

40. **Syzygium imitans** sp. nov.

Arbor \pm 10 m. alta; ramulis leviter compressis; foliis oblongis vel anguste ellipticis usque ad 18 cm. longis ac 6.5 cm. latis, basi obtusis vel cuneatis, apice gradatim vel abrupte obtuso-acuminatis, acumine \pm 1 cm. longo, subcoriaceis copiose pellucido-punctatis, olivaceis vel viridulis, costa supra canaliculato subtus prominente, venis primariis utrinque circiter 10–16 supra manifestis subtus prominulis arcuatim anastomosantibus distincte manifestam venam intramarginalem (nunc duplicem) 3–6 mm. a margine formantibus, venulis laxe reticulatis; petiolo \pm 1.5 cm. longo; inflorescentiis terminalibus usque ad 10 cm. longis ac 13 cm. latis, e basi ramosis, ramis divaricatis, ultimis 2–6 mm. longis; floribus mediocribus, alabastris obovoideis, 8–11 mm. longis apice 6–8 mm. diametro; calycis lobis suborbiculatis, 2–3 mm. longis; petalis liberis; staminibus \pm 1 cm. longis; antheris ellipticis; fructibus ignotis.

INDO-CHINA, Tonkin, Chapa, *Pételot* 6143, 6144, 6147 (**type**, Arn. Arb. Herb.), in forests about 1500 m. alt. CHINA, Kwangsi, Shap Man Taa Shan, *Tsang* 24111.

This species so very closely resembles an unpublished Chinese species represented by *Lau* 1894 from Hainan that we have described it with some hesitancy. It differs, however, in the obvious pellucid-punctations of the leaves, the very definite intramarginal vein and the less manifest secondary one, the longer petioles, and the somewhat more crowded inflorescence. The latter is due to the flowers being a little smaller (the stamens are about one-half as long), numerous, and usually at the tips of short branchlets (mostly about 2 mm. long). In the strictly Chinese species the ultimate branches of the inflorescence are rarely less than 1 cm. long. Possibly this is only a good illustration of the variability within a species, but until more material is available it seems best to regard it as a distinct species.

41. **Syzygium laosense** (Gagnep.) comb. nov.

Eugenia laosensis Gagnep. Not. Syst. 3: 326. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 831, f. 89, 90. 1921.

INDO-CHINA.

Craib notes that in Harmand's collection of this species at Kew the leaf is scarcely separable from that of *Eugenia Thumra* Roxb. In Harmand's specimen at the Gray Herbarium the secondary venation is much more distinct than in any specimens labeled *E. Thumra* Roxb. and there is also a tendency to show a second submarginal vein.

42. **Syzygium Jambos** (Linn.) Alston in Trimen, Handb. Fl. Ceyl. 6(Suppl.): 115. 1931.

Eugenia Jambos Linn. Sp. Pl. 470. 1753; Lour. Fl. Cochinch. 307. 1790; Roxb. Fl. Ind. ed. 2, 2: 494. 1832; Duthie in Hooker f. Fl. Brit. Ind. 2: 474. 1878; Gagnep. in Lecomte, Fl. Gén. Indo-Chine 2: 834. 1921; Craib, Fl. Siam. Enum. 1: 647. 1931.

Eugenia malaccensis sensu Lour. Fl. Cochinch. 306. 1790, non Linn.

Myrtus Jambos HBK. Nov. Gen. Sp. Pl. 6: 144. 1823.

Jambosa vulgaris DC. Prodr. 3: 286. 1828; Hook. Bot. Mag. 61: t. 3356. 1834; Wight, Ic. 2: t. 435. 1843.

Jambosa Jambos Millsp. Field Columb. Mus. Bot. 2: 80. 1900.

INDO-CHINA, Tonkin, Province of Thai Nguyen, Lun Xa, *Pételot s. n.*, March, 1932. Indo-Malaysia. Widely cultivated.

42a. **Syzygium Jambos** var. **sylvaticum** (Gagnep.) comb. nov.

Eugenia Jambos var. *sylvatica* Gagnep. in Lecomte, Fl. Gén. Indo-Chine 2: 835. 1921.

INDO-CHINA, Annam, Hue and vicinity, *Squires 157*. China.

43. **Syzygium Zimmermannii** (Warb.) comb. nov.

Eugenia Zimmermannii Warb. ex Craib, Kew Bull. 1914: 124. 1914; Gagnep. Not. Syst. 3: 335. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 835. 1921.

Eugenia pellucida Duthie in Hooker f. Fl. Brit. Ind. 2: 485. 1878, pro parte (fide Craib).

INDO-CHINA, Annam, Mount Bana, *J. & M. S. Clemens 3110*, May-July, 1927. Burma, Siam (fide Craib).

44. **Syzygium Pierrei** (Gagnep.) comb. nov.

Eugenia Pierrei Gagnep. Not. Syst. 3: 330. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 836. 1921.

INDO-CHINA.

45. **Syzygium crassiflorum** sp. nov.

Arbor; ramulis leviter compressis 3–5 mm. diametro, pallide brunneo-viridescentibus; foliis 24–38 cm. longis 4–6.5 cm. latis, lineari-lanceolatis, apice acutis, basi cordatis, coriaceis, impellucidis, olivaceo-viridibus subtus pallidioribus, costa supra canaliculata subtus prominente, venis primariis numerosis 9–12 mm. remotis, vena intramarginali 2 mm.

a margine disposita, venis secundariis manifestis, venulis laxe reticulatis; petiolo crasso circiter 4 mm. longo; inflorescentiis terminalibus paucis (2-3?) floribus magnis.

INDO-CHINA, Annam, *Clemens* 3831, (**type**, Arn. Arb. Herb.; isotype, New York Bot. Gard. Herb.), May-July, 1927.

There are two half-mature fruits on this collection. In one the hypanthium is 1.5 cm. \times 1 cm. and the other is approximately 2.5 cm. in diameter. Each is attached by a pseudostalk about 1 cm. long and both are crowned by the large (?1.5 cm. long) lobes of the calyx. A number of the stamens are still attached, these are about 2.5-3 cm. long with elliptical anthers \pm 1 mm. long.

Clearly this species is one of the group which Craib mentioned as centering around *Eugenia diospyrifolia* Duthie and *E. formosa* Wall., although it appears to be a distinct species. It differs from *Jambosa Korthalsii* Blume in the closer leaf-venation and the slightly compressed branchlets. Similarly it does not match *Jambosa confusa* Blume at least as interpreted from material representing *Eugenia dolichophylla* Koord. & Val. (*E. malayana* Gagnep.) from Java. *Jambosa insignis* Blume is also distinctly different in foliar characters.

46. **Syzygium samarangense** (Blume) comb. nov.

Myrtus samarangensis Blume, Bijdr. 1084. 1826.

Jambosa samarangensis DC. Prodr. 3: 286. 1828.

Eugenia javanica Lam. Encycl. 3: 200. 1789; Kurz, For. Fl. Brit. Burma, 1: 494. 1877; Duthie in Hooker f. Fl. Brit. Ind. 2: 474. 1878; King, Jour. As. Soc. Bengal 70(2): 81. 1901 (Mater. Fl. Malay. Penin. 3: 511); Gagnep. in Lecomte, Fl. Gén. Indo-Chine 2: 837. 1921; Craib, Fl. Siam. Enum. 1: 647. 1931; Merr. Lingnan Sci. Jour. 13: 41. 1934, non *Syzygium javanicum* Miq.

INDO-CHINA, without definite locality, *G. W. Groff* 5671, May 16-18, 1920. Frequently cultivated. Indo-Malaysia.

47. **Syzygium Harmandii** (Gagnep.) comb. nov.

Eugenia Harmandii Gagnep. Not. Syst. 3: 325. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 840, f. 89. 1921.

INDO-CHINA.

48. **Syzygium Boisianum** (Gagnep.) comb. nov.

Eugenia Boisiana Gagnep. Not. Syst. 3: 318. 1917, et in Lecomte, Fl. Gén. Indo-Chine 2: 840, f. 87. 1921.

INDO-CHINA, Tonkin, Province of Thai Nguyen, route from Hanoi to Thai Nguyen, *Pételot* 5974, February, 1933; Bot Nhang village, 54 kilometers on the route from Hanoi to Thai Nguyen, *Pételot* 6202, October, 1937; Son Bot, *Pételot* 6218.

49. **Syzygium campylocarpum** (Gagnep.) comb. nov.

Eugenia campylocarpa Gagnep. Not. Syst. 3: 320. 1917, et in Lecomte, Fl. Gén. Indo-Chine 2: 842. 1921.

INDO-CHINA.

50. **Syzygium Finetii** (Gagnep.) comb. nov.

Eugenia Finetii Gagnep. Not. Syst. 3: 324. 1918, et in Lecomte, Fl. Gén. Indo-Chine 2: 842. 1921.

INDO-CHINA.

51. **Syzygium stictanthum** sp. nov.

Arbor \pm 6 m. alta; ramis teretibus, ramulis tetragonis vel sulcatis brunnescentibus; foliis pallide brunnescentibus, ellipticis vel oblongis 5–8 cm. longis 2.5–4 cm. latis, apice abrupte obtuseque acuminatis, basi acuminatis, supra nitidis nonnumquam minute nigro-punctulatis, subtus copiose ac minute nigrescente-glandulosis, costa prominula, venis primariis secundariisque creberrimis ascendentibus leviter elevatis sed non prominulis, vena intramarginali vix 0.5 mm. a margine disposita; petiolo \pm 7 mm. longo; inflorescentiis terminalibus et in axillis foliorum superiorum dispositis, circiter 5 cm. longis, ramosis, rachi ac ramis 4-angulatis, floribus sessilibus (post anthesin), calycis tubo circiter 6 mm. longo apice \pm 6 mm. diametro, lobis 2 mm. longis nonnumquam vix 2 mm. latis; antheris circiter 0.5 mm. longis ovato-ellipticis glanduloso-mucronatis; fructibus ignotis.

INDO-CHINA, Laos, Province of Cammon, Xa Ngom, *Pételot* 4675 (*Colani*) (**type**, Arn. Arb. Herb.; isotype, New York Bot. Gard. Herb.), December, 1930.

In leaf-outline and type of venation this species suggests *Syzygium cochinchinense* (Gagnep.) and *Cleistocalyx nigrans* (Gagnep.) Merr. & Perry. It differs from both, however, in that the veins are closer, a little less distinct and show less reticulations, also the under surface of the leaves is profusely and minutely glandular. The calyx (tube and lobes) is also copiously glandular and in the dried state longitudinally wrinkled. None of the flowers are in bud and we know nothing of the corolla. The calyx-lobes are somewhat irregular in shape and in size. Further flowering and fruiting stages are desirable to associate this species with its natural affinities.

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